

THE CONSEQUENCES OF THE WORLD ECONOMIC CRISIS ON THE MACEDONIAN FINANCIAL AND REAL ESTATE SECTOR

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Abstract

The world economy in recent years has suffered its biggest blow, even from the time of global depression, impact that severely damaged the developed and developing countries around the world. The world financial crisis, at first, has emerged in the U.S., as a mortgage crisis wherefrom, has spread to other parts of the world and in Macedonia, as well, evolving into severe economy crisis, reflected through drastic decline in GDPs worldwide, and occurrence of world recession. To analyze the impact of the global financial crisis, on the Macedonian banking sector, it is necessary, first to analyze the structure of the financial markets and intermediaries in the Republic of Macedonia, through the aspect ratios of good and bad loans, the ratio of financial intermediation, the linkage of the Macedonian banks with global investment banks, ratios of capital adequacy of the banks, the usage of structured credit financial instruments or derivatives and the development of secondary capital markets in the Republic of Macedonia. Finally, it is necessary to analyze the impact of the global economic crisis on the Macedonian real estate sector through the structure of foreign trade, the structure of Macedonian import and export, and the rates of unemployment and production. The basic purpose of this paper is to present and explain the impact of global financial and economic crisis on the Republic of Macedonia, and to suggest some alternative solutions to overcome the negative consequences.

Keywords: *Global financial crisis, credit rating agencies, global economic crisis, financial derivatives, mortgage crisis, collateralized debt obligations (CDO), capital adequacy, trade deficit, financial intermediation*

The Impact of the World Economic Crisis on the World Economy

The global financial and economic in 2008 was consequence to several factors, such are: the mortgage crisis in the USA, the relaxed monetary policy of the FED, the failed rating of the credit rating agencies for the securitized securities, and the policy of large budget deficits, made by the G10 countries. The prime reason for the crisis, certainly was the shooting of inflated real estate bubble²⁵¹ in the U.S. and the lost of value of the issued securitized securities, known as collateralized debt

²⁵¹ Financial bubble is a condition that occurs when a financial asset is overpriced, and as a result of that, it comes to a sharp fall in prices of such assets.

obligations (CDOs)²⁵². At the same time, the insurance company, BNP Paribas²⁵³ has written off the claims of several investment banks, which was signal for insolvency in the secured segments of the markets. Soon large number of banks, either has bankrupted, or has been nationalized by the state.

Table 1. Top 10 underwriters of CDO²⁵⁴

Underwriter	2002	2003	2004	2005	2006	2007	Total
Merrill Lynch	0	3	20	22	33	18	107
Citigroup	3	7	13	14	27	14	80
Credit Suisse	10	7	8	9	14	6	64
Goldman Sachs	3	2	6	17	24	7	62
Bear Stearns	5	2	5	13	11	15	60
Wachovia	5	6	9	16	11	5	52
Deutsche Bank	6	3	7	10	16	5	50
UBS	5	2	5	10	16	6	46
Lehman Brothers	3	4	3	6	5	6	35
Bank of America	2	2	4	9	10	2	32
TOTAL	47	44	101	153	217	135	697

The global financial and economic crisis had disastrous consequences on world economy.

Through the transmission mechanism and the efficiency of the financial markets, the crisis first emerged in the U.S. and then has spread to other countries in the world, abroad. At first, the investment and other banks, with financial derivatives in its assets and liabilities portfolio, were targeted. At the same time and the world stock markets, where were traded these instruments, marked a downfall, as a result of that, the stock prices of the market firms and banks has significantly decreased

²⁵² CDOs are structured securities issued in several "tranches", issued by a special entity and collateralized with some type of debt, usually bonds or loans.

²⁵³ Prof. Dr. Taki Fiti, "Phenomenology of the economic crisis", Economic Faculty, Skopje, 2009, Page 247

²⁵⁴ Anna Katherine Barnett, "The story of CDO market meltdown", Harvard college, 2009 , page 26

and fell below their real value. This undervaluing of the stocks, certainly should be a reason more, for investors to enter the market and buy the shares, with intention, in future to sell them, where the increased demand might lead to a rise in stock prices and overcoming the financial crisis, yet it was not the case due the pessimistic expectations of the investors, that prices in the future could continue to fall, and that the crisis has not reached its epix. On the other hand, this pessimism of the investors, has further contributed to the immersion of the crisis and the emergence of the global recession.

One of the top investment banks, which did not withstand the impact of the crisis was Lehman Brothers, which at that time was the fourth largest, investment bank in the U.S. with a long tradition and a solid credit rating. However in the 2008, Lehman Brothers suffered huge losses due to the subprime crisis in the USA. The bank loses were result of the long position 255of low-ranking collateralized debt obligations256 by bank. In the first and second quarter of the 2008, the bank reported losses of approximately 5.6 billion dollars and was forced to sell its assets of total value of 6 billion assets257. As a result of such movements, the shares of Lehman Brothers have fallen sharply, which let down all the expectations, that the crisis has past. The collapse of Lehman Brothers, and shortly after, The Bear Sterns258, has led to the freezing of the credit markets in the USA, and losing the confidence of the economic agents in financial markets.

At that time, several large banks abroad the U.S., have had financial and liquidity problems. For example, Belgian bank Fortis, was saved by the state to fail, also Hypo Real, was saved, as a result of the German government interventions. As we can see, the period after the crisis was characterized by frequent government interventions, that were opposite with the principles of the market economy, but these banks were too big to fail, so the effects from their rescuing is greater than the consequences of their bankruptcy.

However, the financial crisis was just the beginning, because due to loss of investor confidence, the collapse of financial institutions, the falling stock prices, the reduced lending by commercial banks, there has been a large reduction in liquidity in the economy, and the decline in world production and demand, which in extreme traits, has lead to the emergence of a global economic crisis and the emergence of recession worldwide259. Although a large number of countries, particularly developing countries, were not affected by the financial crisis, however, the

255 A long position involves buying securities with intention for future selling, because the future price is expected to be higher.

256 Securitized securities based on previously issued mortgage loans.

257 http://en.wikipedia.org/wiki/Lehman_Brothers

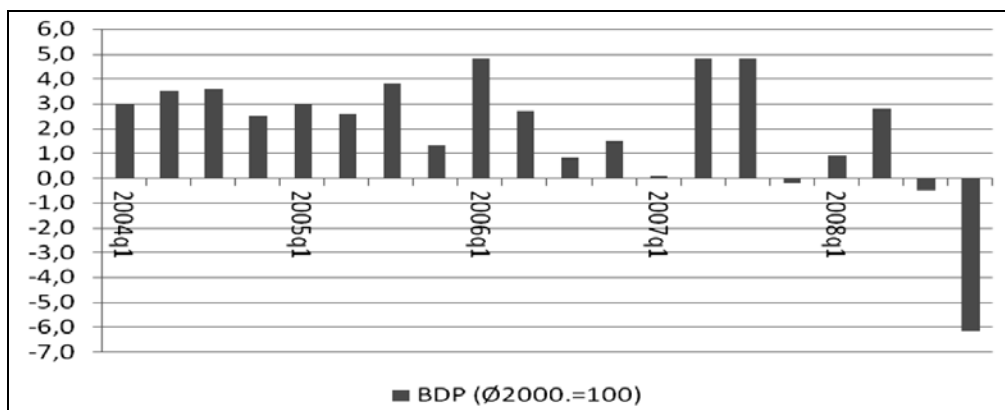
258 U.S. investment bank that went bankrupt as a result of the global financial crisis

259 Recession by definition is phase, when the GDP of a country has negative growth, two quarters in a row. However recession implies a state of reduced production and demand in a particular country or worldwide.

economic crisis was imminent for all the countries because of capital and trade and interdependence of the developing countries from developed countries.

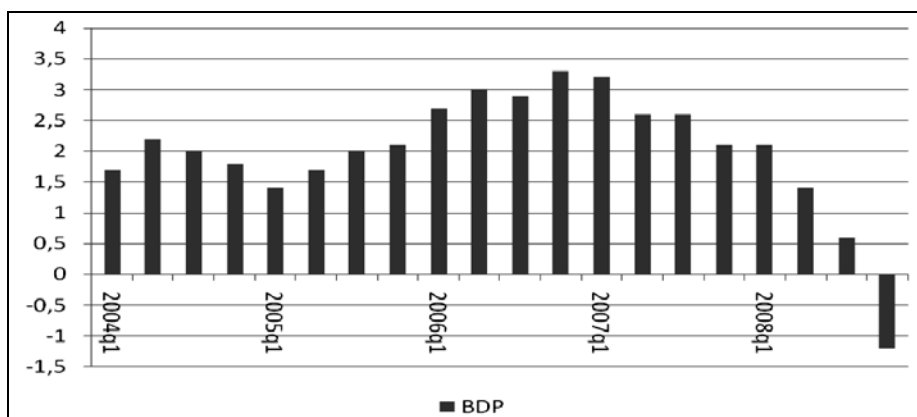
Within the occurrence of the global economic crisis, capital investment ceased to be on the relation developed - developing countries, as previously were, now there was qualitatively dislocation on the relation developed - developed countries, due to loss of the investors confidence, which negatively affected the growth developing countries. The crisis has reduced the demand for foreign products, so that all the countries have focused primarily on the domestic production.

Chart number 1.index of growth of the real GDP in the U.S. by quarters 2004-2008²⁶⁰



Through the transmission mechanism of the foreign account, the crisis has passed in the euro zone, and in Macedonia, as well.

Chart number 2.the index of growth of real GDP in the euro zone, by quarters²⁶¹

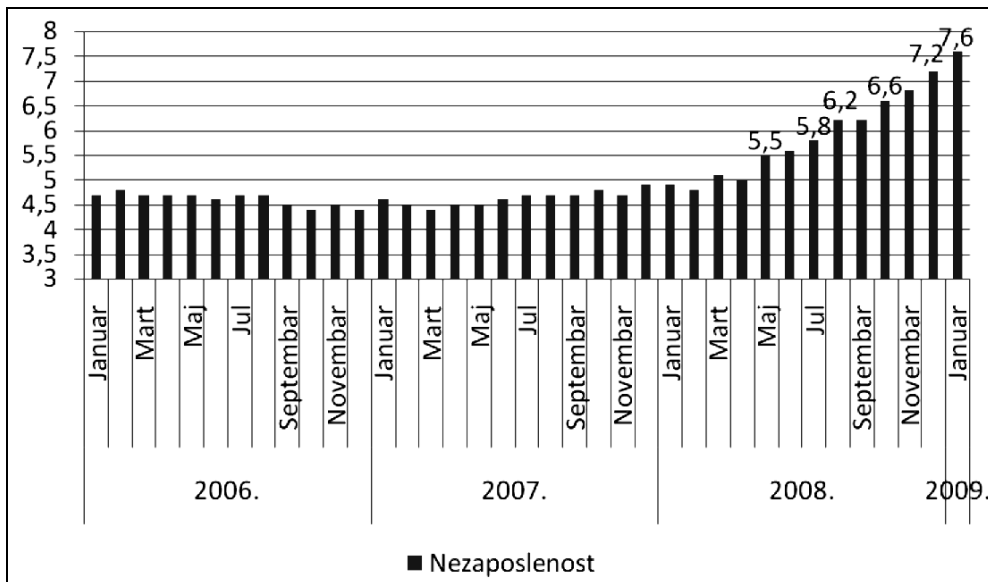


260 Stephen Dragutinovic, "World economic crisis and the consequences on Serbian economy" Institute faculty of economics, finance and administration, page.33

261 Stephen Dragutinovic, "World economic crisis and the consequences on Serbian economy" Institute faculty of economics, finance and administration, page.35

Recession, as it is known, generates many negative consequences, that are destroying the world economy, but the biggest problem is, of course, the increased unemployment by laying off workers and closing factories due the declined demand, and increased costs for production.

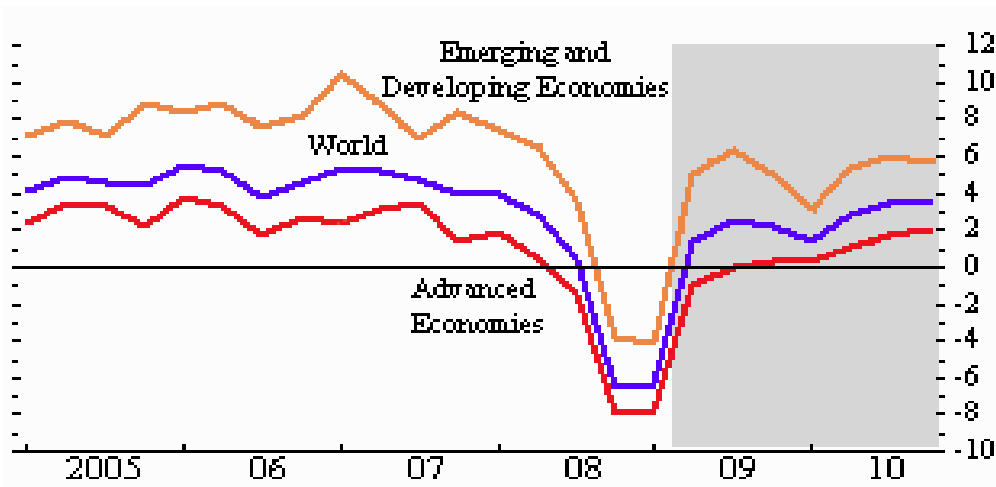
Chart number 3..The unemployment rate in the United States, 2006-2009²⁶²



The unemployment, however, is increased in the post-crisis period, so in the U.S. in 2011, it was 9.8%, a record high for this country-the world economy leader. The unemployment in this period in the Euro zone was approximately 8-9%. Summing all these indicators, we can conclude that the world in 2008 has descended into a great depression.

²⁶² <http://www.tradingeconomics.com/Economics/Unemployment-rate.aspx?Symbol=USD>

05.03.2009

Chart number 4. Global GDP growth²⁶³

The monetary policy was expansive, and led by the United States, in order to increase the lending processes, so in this period, there was global declining in the reference interest rates worldwide. The interest rate of the FED has declined from 5.25% in September 2007, to 0 and 0.25% in December 2008, and still was not enough for producing growth of the economy, mainly because of the negative expectations of the economic agents. We shall conclude that the most effective measure for reduction of the recession, were the active Government measures focused primarily on increasing the aggregate demand and supply of the economy. The most useful measures were:

- bank nationalization,
- buying parts from banks,
- garanting export companies,
- credit subsidies
- increased public and private investment

The Consequences of the Global Economic Crisis on the Macedonian Financial Sector

The banking system has retained the role of the most developed financial sector in the Macedonian economy. Total assets of the banking sector on 31.12. grew with 7.1%, in comparison from last year. The reasons for the dominant role of the banks were:

²⁶³ Prof. Dr. Abdulmenaf Bexheti "Anti-crisis measures in Macedonia and their effects-are they enough?" March 2010, page 8

- the traditional role of the banks as major financiers of the Republic of Macedonia
- poor development of the financial markets
- deregulation and competition in the banking sector
- high profitability of banks.

The global financial and economic crisis had a different impact on the Macedonian financial and real sector. The Macedonian financial and banking sector was not directly affected by the global financial crisis, but could not avoid the negative effects of the global recession movements, that were spilled on the domestic real sector, and through reduced production and consumption on the banking sector, as well. The stable position of the banking sector was result due to its closeness to international financial markets, lack of exposure to "toxic financial products," its strong capital and liquid position, caution in taking risks, and effective prudential measures taken by the National Bank of Macedonia (NBRM). Although the world crisis has been spread on the relation: financial - real sector, in Republic of Macedonia, an opposite case had happened, so the crisis occurred, because of the recession that limited and reduced the lending and financing, afterwards.

In the first half of 2009, the uncertain environment, the rising trade deficit and the decline in the capital inflows, significantly has slowed the growth of the banking system, worsening the profitability of banks, at the same time. In such a circumstances where the majority of the total debt is depended in foreign currency component, the reliability of the debtors from the stability of the exchange rate is the key. Also, in recession conditions, the greater is the sensitivity of the banks from the changes in the interest rates, so the interest rate risk is eminent, which, along with foreign currency risk, represented a major challenge for the Macedonian financial sector during the crisis. On this occasion, we should mention that credit risks have increased, in this period as a result of worsening the loan portfolio of the banks.

Table 2. Credit risk in Macedonia (in millions)264

	2009	2010
Total credit exposure	263,353	276,409
calculated losses	17,090	17,996
average risk	6,49	6,51

As we can see from this table, in the period after the crisis, it comes to an increase in credit risks as a result of bad investments and loans.

264 Source NBRM,

Table 3. liquidity rates of the Macedonian financial sector²⁶⁵

Показател	11.2009	12.2009
Liquid assets / Total assets	28,8%	29,5%
Liquid assets / Total liabilities	35,8%	37,5%
Liquid assets / Short-term liabilities	34,4%	35,9%
Liquid assets / Total deposits of non-financial entities	53,3%	53,7%
Liquid assets / Total deposits population	91,6%	92,5%

During the occurrence of the crisis, the stability of the financial sector is perceived, through the increasing of the liquidity ratios of the banks. Durability and stability of the banks are best perceived by the high ratio of capital adequacy, or by the high capacity for responding to credit shocks.

Table 3.The capital adequacy ratio of the Republic of Macedonia in 2009²⁶⁶

No.	Description	Total
I	Assets weighted by credit risk	
1	Balance sheet assets weighted by credit risk	177.369
2	off-balance sheet assets weighted by credit risk	25.307
3	weighted assets credit risk (1 + 2)	202.676
4	capital requirements to cover credit risk (8% from no.3)	16.214
II	weighted assets currency risk	
5	aggregate foreign exchange position	11.735
6	net position in gold	0
7	assets weighted according to currency risk (5 + 6)	11.735

²⁶⁵ Source NBRM

²⁶⁶ Source NBRM

8	capital needed to cover the currency risk (8 % from no.7)	939
III	Risk-weighted assets (3+7)	214.411
9	capital required to cover risks (4 + 8)	17.153
IV	Own funds	35.115
V	capital adequacy rate(IV / III)	16,38%

The first attack by the crisis in 2009, has created great pressure on the Macedonian denar because of the high Euroization of the financial obligations in the country, where has emerged some serious pressures and risks on the financial stability, which can be seen, through increased buying of Euros, reduced volume of capital flows and the existence of an imbalance of foreign exchange market, which created some conditions devaluation rate. This situation was even greater, if we known to the Macedonian denar is pegged to the euro and the trade deficit is very high and the reserves are limited.

The Consequences of the Global Economic Crisis on the Macedonian Real Sector

The effects of the global economic crisis were observed on the Macedonian economy, a little later, with some delay, unlike the other developed countries. The reasons for this relative lag, were primarily the resistance of the financial sector from the financial crisis in Macedonia (where the financial crisis could create economic and social crisis), and the minor importance role of Macedonia, in the international trade and capital transfers. The Republic of Macedonia is relatively small and open economy, which is primarily import dependent country, with relatively high trade deficit. The high deficit, in recession times, represents the biggest problem of the Macedonian economy, particularly in terms of reduced trade, reduced exports and imports, and fixed exchange rate policy.

Table 1. Macedonian export 2009-2011, by country (in mil. USD).²⁶⁷

Country	2009	2010	2011
Deutschland	455,86	712,42	1.241,87
Serbia	337,81	271,82	333,37
Greece	291,65	246,20	215,22
Italy	218,28	235,36	289,75
Croatia	152,74	123,73	139,62

As we can see from this table, Macedonian export targets the countries in the Euro zone (like Germany, Italy, Greece), and also the Western-Balkan countries. The same orientation and structure is characteristic for the import component, as well.

Table 2. Macedonian import 2009-2011 year (in mil. USD)²⁶⁸

Country	2009	2010	2011
Deutschland	521,68	613,48	728,89
Serbia	441,86	448,93	566,28
Greece	397,99	419,44	497,85
Italy	368,51	335,21	418,82
Croatia	118,40	113,29	133,12

Unlike the financial crisis, the economic crisis emerged in the Republic of Macedonia, either, through the import channel, or by reducing demand for Macedonian products by foreign partners, mostly from Germany, Greece and Italy. Under these conditions, with relatively low national demand, the aggregate demand is reduced to very low level, generating the appearance of recession and depression trends.

²⁶⁷ Source NBRM

²⁶⁸ Source NBRM

Table 3. The structure of the Macedonian exports (in mil. USD)²⁶⁹

Branch	Export in 2012 година
Food products	373,24
Leather products, tobacco and paper	1213,23
Clothing, footwear and sanitary	834,55
Transport equipment	352,61
Chemical products	747,14

As can be seen from this table, the biggest problem in Macedonia's export is the structure of the export, in a high share of unfinished basic products that do not generate growth in normal conditions, especially in recession. For these reasons some measures are required, to stimulate the exporters, on the one hand, and measures for the restructuring of Macedonian production, in order to reduce the impact of the recession for the future. In Macedonia, the most affected branches were the metal industry, and the leather goods branches, which due to reduced export demand, have had suffered huge losses, and had to lay off many workers. Macedonia's unemployment rate in 2011 was 31.4%, which is result of the Macedonian transition problems and the lack of practice in educational processes. In recession times, we can expect this rate to rise further, why are urgently needed measures, to stimulate the small and medium enterprises and developing programs for self-employment by the government.

Fiscal and Monetary Measures for Reducing the Consequences of the Crisis on the Macedonian Economy

To overcome the crisis, developed and developing countries used expansion mix of fiscal and monetary measures aimed for raising aggregate demand and also to revive production and consumption, as well. In economic theory, it is known that the monetary and the fiscal policy are substitutes, so in order of overcoming the recession negative effects, expansionary fiscal policy is effective, because the expansionary monetary policy in long terms, only manages to increase the level of the prices, within no change in output or manufacturing. Fiscal studies in Eastern Europe and Central Asia prove that with good management fiscal policies are inciters of the growth.²⁷⁰

At the Republic of Macedonia, in the period after the crisis, the Government has adopted several packages of anti-crisis measures aimed primarily at increasing the

²⁶⁹ Source NBRM

²⁷⁰ Prof. Dr. Abdulmenaf Bexheti "Anti crisis measures in Macedonia and their effects-are they enough?" March 2010, page 23

liquidity of the economy, supporting small and medium enterprises and reducing the fiscal burden on companies.

The first package of anti-crisis measures was elaborated in 2008 and included measures of estimated 20 billion MKD worth. The first package of anti-crisis measures have been adopted since 2008 in the amount of 330 million Euros, and were targeting the enterprises with impaired liquidity and accumulated problems of the past.²⁷¹

The second package of anti-crisis measures were, in the form of a multiannual program for the implementation of infrastructural measures, with total amount of 8 billion Euros. There were projects of road and rail infrastructure, energy sector, construction and sports objects. The reason for introducing this package of measures is securing economic growth amid the crisis, reducing the recession.

The third package of anti-crisis measures had approximately 70 anti-crisis measures targeting three segments:²⁷²

- a.) supplementary budget - review projections in accordance with the new situation,
- b.) credit support to enterprises - using a credit line of the European Investment Bank in the amount of 100 million Euros in loans and guarantees,
- c) other measures to support enterprises to support export subsidies and reducing costs.

The fourth package had measures for:²⁷³

- Limiting the interest rate for the first year to 6%, limiting the maximum interest rate of the second year to 7.5%.
- Change the amount of individual loans intended for end users (micro to 40,000 Euros to 400,000 Euros small, medium to 3.5 million Euros),
- Segregation of the date of payment of liabilities on gross - wages and contributions to the liabilities for taxes and VAT from 15th to 25th in the current month;
- Facilitating the criteria for receiving financial assistance under the Program for financial support for agriculture in 2010 for use of funds,
- Reducing the fee for the privatization of the construction of legal entities by 30%.
- Introducing credit line to support micro, small and medium enterprises with guarantee scheme by MBPR, with total assets of 15 million Euros.

271 Prof Dr Sreten Miladinovski, M.A. Aleksandar Dejanovski , "The impact of the global economy crisis over Macedonian economy", " Global Security and the challenges of the 21st Century" - Conference, 2012, page 8

272 Prof Dr Sreten Miladinovski, M.A. Aleksandar Dejanovski , "The impact of the global economy crisis over Macedonian economy", Global Security and the challenges of the 21st Century" - Conference, 2012, page 9

273 <http://arhiva.vlada.mk/?q=book/export/html/5118>

At the same time, the National Bank of Macedonia in order to maintain the stability of the Macedonian denar the Bank, did sales of foreign currency in the exchange market, in the first half of 2009, tightening the monetary policy by increasing the benchmark interest rate of 7% to 9% in 2009 and by increasing the reserve requirement. Some instruments are presented in the next table.

Table 4. Some monetary instruments used by the NBRM in 2009 yr

Type of measure	Number of banks	Number of savings
down meetings of the Board to monitor information technology	1	0
Improving the system for monitoring credit risks	1	0
evaluation systems for managing liquidity risk by the Board of Risk Management	1	0
Improving the system for monitoring the risk from money laundering	1	0
The borrowing bank to reach the amount of liquid assets, with which to provide adequate coverage percentage of total liabilities and continuously maintains that level	1	0
The borrowing bank to submit to the NBRM calculations of total liabilities and total liquid assets from the previous day, every day	1	0
prohibition of granting loans and other forms of credit exposure to entities other than credit exposures secured by first-rate instruments	1	0
The borrowing bank is obligated to notify NBRM of any change of internal policies for managing credit risk	1	0
withdrawal of consent for acquisition of shares in the bank	1	0
reporting NBRM on the status of court proceedings are conducted against the bank	1	0

The fiscal and the monetary measures contributed to stabilizing the Macedonian financial sector and mitigate the recession effects. But, there are some debates, and

confrontations, about the effects of this monetary and fiscal measures. Professor Abdulmenaf Bedzeti²⁷⁴, has analyzed the governments anti-crisis measures, giving the following conclusions:²⁷⁵

- in almost all of these measures there is an expressed form of relativization of the same, through different variations- systematic and spontaneous, that usually in a shortage of fiscal culture and fiscal discipline, exceptions are turned into the rules of behavior.
- the biggest part of fiscal measures for fiscal “saving” were forced due to the significant underperformance of public incomes (above all VAT and excise) and were not designed as anti-cyclical fiscal measures or “cyclical regulated budget balance” that would have positive impact on the economical cycle of Macedonian economy;
- delayed fiscal measures – at great number of measures undertaken fiscal obligation already exists and is difficult to return the budget users
- reducing with greater intensity of the already insufficient (structural) developmental component of the budget – capital expenditures are reduced over 18%
- usually “tightening the belt” in the post-election period and in the second half was not proved to be real in the realization.

Summing all the effects, we can conclude that, in order to overcome the consequences of the economic crisis on Macedonian economy, the best macroeconomic combination is expanded fiscal and not-so tight monetary policy. The expanded fiscal expenditures should target long-term investment projects, that are natural generators of development. The NBRM should decline the interest rate in order to stimulate the investors, as well.

The best recommendations for the future macroeconomic policy are:²⁷⁶

- Permanently to follow the economic situation - with sustainable analysis – cohesively with coordination and synergy to bring measures on the basis of information , analysis and research of all relevant institutions
- The economic cycles of Macedonian economy need cyclical “regulated fiscal balance” explicitly based on the fiscal possibilities of the country
- Capital strategic investments can not be selected without consistent application of cost and benefit Analysis.

²⁷⁴ Professor at the faculty of business administration at south east European university , Macedonia

²⁷⁵ Prof. Dr. Abdulmenaf Bexheti "Anti-crisis measures in Macedonia and their effects-are they enough?" March 2010, page 28

²⁷⁶ Prof. Dr. Abdulmenaf Bexheti "Anti-crisis measures in Macedonia and their effects-are they enough?" March 2010, page 29

- Until the consolidation of economy – without exceptions of determination to “take off” from the budget all expenditures that are not productive for Macedonian economy and that can be postponed to “better times” and are exerting pressure on the paid balance of the country.
- To re-examine until is too late, without need the firm attitude “against the engagement with IMF”- we will dearly pay the loans from the commercial capital market. The industry is in need of at least three times more financial capital than the “EIB Program”.

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